

## BISHOP WORDSWORTH'S SCHOOL PHYSICS TEACHER VACANCY SEPTEMBER 2020



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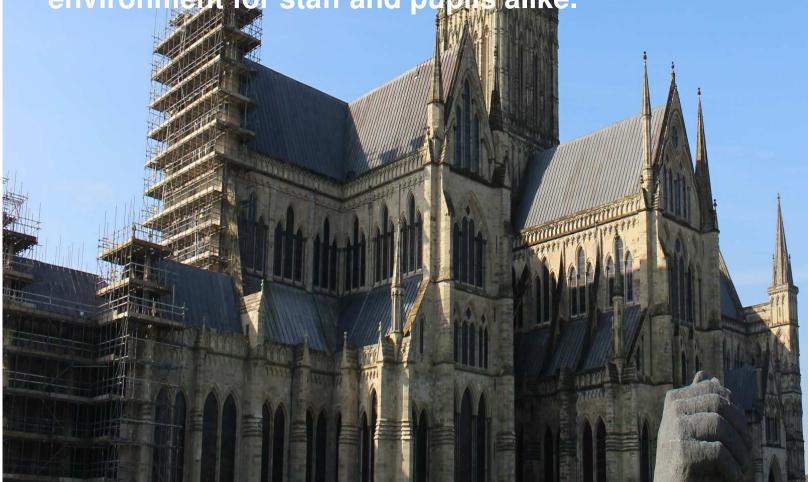
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#### The School

Bishop's is a unique school in a unique place. Boys come to us from all types of background, united by their aptitude for an academic education. It is our privilege to foster every boy's ability, and equip him to excel.

The school is renowned for its strong academic tradition and outstanding results, but educational quality here goes well beyond examinations. We fuel boys' wider intellectual curiosity, promote artistic expression, and give opportunities for leadership and personal development. A day at Bishop's brings genuine breadth of activity, challenge and pace, making this a stimulating environment for staff and pupils alike.





#### **History and tradition**

Bishop John Wordsworth intended that his school should provide a centre of academic excellence in the heart of Salisbury. Since 1890 Bishop's has fulfilled that mission, and today we educate over 900 boys aged between 11 and 18. Under the shadow of the Cathedral spire our eclectic buildings span the seventeenth to the twenty-first centuries, reflecting the school's heritage. This creates a very special atmosphere in which boys are conscious, on a daily basis, of their part in a long tradition of academic endeavour.

#### Admission on ability

As a Church of England Grammar School and Academy, we set our own entrance test and policy on admissions. Any boy living within reasonable travelling distance of Salisbury is welcome to apply, and boys from the broadest range of schools and backgrounds thrive here.

#### High expectations and high achievement

Bishop's is one of the best-performing schools in the country and outstanding levels of success are part of everyday life. We never take this for granted, however, continuously supporting and encouraging boys to give full commitment to all that they do. Well aware of our expectations, the boys relish the opportunity to aim high and achieve their goals. Every boy is encouraged to find something at which he excels and to develop self-confidence as a result.

#### **Christian values**

Our Church school ethos permeates the fabric of life here – from regular worship in the Cathedral and our Chapel, through religious education, to the way we operate as a community. We welcome boys of all faiths or none, but the Christian values of concern for one other, respect and tolerance provide a moral compass that influences everyone, both personally and culturally.

#### **Spirit of togetherness**

As the school motto *veritas in caritate* (truth through caring) suggests, consideration and thoughtfulness are central to life at Bishop's. Right from day one, we work hard to make boys feel valued and welcome. Within each year there are four or five tutor groups of 30 pupils, led by form tutors. During Year 7 we monitor these groups carefully, knowing that the happier boys are, the quicker they will settle in and flourish. Through the house system and a host of other activities boys mix across years, fostering a close community in which older boys can become friends and mentors to their younger peers. If problems arise the form tutor or the relevant Head of School are the first points of contact and Heads of School operate an 'open door' policy whenever possible.



#### **Academic life**

Rigour, depth and breadth characterise academic life at Bishop's. Boys enjoy being taught by highly qualified subject specialists. Teachers teach so that boys do well – but also to extend pupils' knowledge and understanding beyond the narrow confines of exam syllabi. Throughout, we aim to engender a passion for learning and the skills to pursue that passion independently. In and out of school there are countless opportunities for boys to develop their academic interests – workshops, lectures, master classes, fieldwork and more. Boys regularly take part in school and national competitions, with many gaining success both within and beyond the curriculum.

#### **Extra-curricular**

A broad extra-curricular programme helps boys to understand more of the world, to challenge themselves and to grow as individuals. At Bishop's we aim to provide many and varied opportunities, so that every boy has the chance to find new interests and achieve great things. Competitive sport is in the lifeblood of the school. Rugby, Cross Country, Athletics, Basketball, Soccer, Hockey and more figure in the sporting calendar, with regular fixtures against schools across Wiltshire and the South West of England. While we are justly proud of our outstanding reputation for sporting success both regionally and nationally, we value equally the commitment of boys who give their best to an activity they enjoy.





BWS 1st XV at the NatWest Schools' Cup Final at Twickenham - 29 March 2017



# The opportunities to experience activities here and abroad are immense.

Music is very strong at Bishop's, and many boys have instrumental lessons at all levels. As well as touring abroad and in the UK, the Choir performs regularly occasions school Cathedral. Boys play in wind bands. brass and string ensembles, and often collaborate to form rock bands of their own.

Drama thrives too, with every age group having opportunities to take part either in clubs or productions. Through vibrant our department boys can develop their talents both in and out of lessons. Theatre and gallery trips feature regularly, as do plays, musicals and concerts on a variety of scales, many benefiting from our collaboration with the girls' grammar school. Over 40 clubs and societies meet during lunch breaks or after school.

A boy can become involved in voluntary work locally, play chess, try debating or film-making. The opportunities to experience activities and destinations here and abroad are immense: from Outward bound and community service to fieldwork, expeditions and cultural exchange, all boys will have the chance to give it a go.

#### School Routine Lower School (Years 7 & 8)

The routine of daily life for Years 7-8 at BWS is organised and run by the Lower School Office who monitor the academic progress of the boys through the analysis of report data and receive information from all aspects of boys' schooling, including rewards and sanctions, so that they can both support and challenge boys to do their best. Largely, boys are taught within their tutor groups and follow a common timetable. Many departments begin GCSE syllabuses in Year 9. As a minimum, teaching in all subjects follows the National Curriculum, and the knowledge, understanding and skills that boys acquire lay solid foundations for their future studies.

#### Middle School (Years 9 to 11)

The School places great emphasis on ensuring that pupils achieve the highest academic standards of which they are capable, whilst encouraging them to develop their social, cultural and recreational skills and interests at the same time. This means that we adopt a firm but caring approach to all aspects of School life. The Staff endeavour to work closely with parents in ensuring that boys spend their time at School profitably but happily. In the Middle School this policy is carried out by working closely with pupils and parents on academic, pastoral and career matters and by trying to equip them with a good range of qualifications and skills by the end of Year 11 - whether they go on to enter the Sixth Form or leave school at this stage. Pastoral care is delivered through the tutorial programme and personal interviews carried out by tutors within our tutorial programme. Impartial Careers Guidance is provided by the School's Careers Adviser and the School Chaplain is also available for counselling and guidance. Members of the team maintain regular contact with Middle School pupils and with one another and regularly meet with the Headmaster to discuss pupils' progress.

#### **Sixth Form**

Almost all boys stay on into the Sixth Form, where they are offered a broad academic curriculum, supported by stimulating enrichment courses. We have been teaching female students through a partnership arrangement for many years, and are excited that from September 2020 BWS Sixth Form will become fully co-educational.

Bishop's is a tight-knit community of nearly 1000 students; about a third of these are in the Sixth Form, including about 140 Year 12 students who join us after Year 11. In the last Ofsted inspection both the school and the Sixth Form were rated 'Outstanding' with the inspector noting that 'The school provides an outstanding Sixth Form where students are extremely well prepared for academic studies at university and develop as well-rounded young people. Expectations are high and standards achieved in A-Level examinations are outstanding.' Most students go on to Higher Education and we have a superb record in university entrance, with many embarking upon the most demanding disciplines at leading universities, including a very proud record of success at Oxford and Cambridge. Our school is renowned for its strong academic tradition and outstanding results – however we see our role as going much further than providing our sixth formers with an excellent base for university entry and preparation for employment. We are also very proud of the rich mixture of extra-curricular opportunities that our students enjoy, including sport, music and drama. Our Sixth Form is further strengthened by strong pastoral and academic support – we are a caring community in which the needs of individuals are given great emphasis.



#### **The Department**

The Science Faculty consist of a sizeable team of teaching and support staff with large numbers of 'A' level classes in Physics, Biology, Chemistry, Geology and Psychology. Academic standards are high with students who are polite, hardworking and fully engaged in their studies. The Science Faculty provides a large breadth of 'STEM' based enrichment opportunities with contributions from teacher, parents, external visitors and the students themselves.

In Year 7 boys are taught Biology, Chemistry and Physics by a single teacher which provides students with a superb opportunity to develop the necessary Science wide skills in a very practical course. From Year 9 students are taught each of the sciences separately when they start the foundations of their GCSE courses. All students study the AQA 9-1 course in each of the separate Sciences. At A Level the OCR A courses are studied in each Science. Schemes of work are detailed and complimented by a wide range of resources which are collaboratively developed and effectively shared across the faculty so that they support the planning undertaken by teachers. External examinations results are consistently strong and we expect a strong cohort of female students to take up Science A Levels in the 2020-21 academic year once BWS become fully Coeducational in the 6<sup>th</sup> Form.

The majority of the Science teaching is carried out in fully equipped, specialist accommodation. There are eight very well equipped laboratories, some specifically set up for the delivery of 'A' Levels in Chemistry, Biology or Physics as well as further general laboratories and a science classroom.

The schools twitter feeds give an impression of some of the aspects of the work of the Science Faculty. In addition, there is detailed information on the Science Curriculum pages of the school website which will be of interest to applicants including the annual report on activities that were undertaken in the Science Faculty over the last academic year.





#### Report on the Science Faculty Activities 2018-2019 Academic year

All the BWS Science staff endeavour to deliver engaging lessons that stimulate our students interest in this subject as well as providing them with a wealth of additional extracurricular activities, which not only complement and extend their learning, but also develop their understanding of the importance of Science in everyday life. This year, as is often the case at BWS, our students have risen to this challenge and not only worked hard in lessons but have engaged with a wide range of enrichment activities with notable successes and highlights along the way.

With the exception of Geology, all areas of Science have had the luxury of consolidating and embedding the new A-level courses that have been introduced over the last few years. In reality, it is fair to say that the hard work of staff over the previous years has been highly effective in preparing both Yr11 and Yr13 students for their science qualifications with recent results being excellent. However, it has felt good this year to have some time to review and make small modifications to courses and revision programmes which we hope will have further supported our students in achieving their best.

The Science enrichment programme has this year taken on a life of its own. Student leading such as the Young Medics Society and Engineering Society have had a varied programme of speakers throughout the year. In addition, the BAYS programme (British Association of Young Scientists) has provided the students with ten after school talks on wide range of Scientific topics.

These have included presentations entitled 'Cell division', 'The Exploration of the Geology of the Earth', 'Structural Engineering', 'The Grand Challenges in Medicine', 'Critical Care Medicine' and 'Respiratory Diseases'. Each of these talks has been delivered by academics and professionals from a number of scientific disciplines and have seen excellent levels of attendance (often around fifty students for each session) with students from BWS, Godolphin and SWGS. Geology has always had female students but this year we have had the pleasure of teaching several female Sixth Form Chemists so, we certainly feel that the Science Faculty is well prepared to we come female students from September 2020.

We never underestimate the way that the students at BWS enjoy a challenge at we often be overheard encouraging our students by saying, 'What is not to like abou Scier Challenge?' - even if we all know it often comes in the form of a written exam! Conse auenti we work hard to provide opportunities for our students to enter a whole ealth competitions. This year these have included the Chemistry Challenge, the nemistry Olympiad, the Biology Challenge, the Biology Olympiad and the Physics AS Ch nge a GCSE Challenge. The Science staff prepare the students for these competitions, additional lunchtime and afterschool clubs in addition to sorting out the administration some cases then marking large numbers of examination scripts! I would be surmany other schools could rival the sheer numbers of students who enter these compand our students should be congratulated for their enthusiasm and the resilience their undertaking these competitions. Whatever the outcome, we are confident the profit condemically so these competitions halp in the develorment of educations. runn tion and prised if etitions ev show benefit academically as these competitions help in the development of advanced problem

#### Report on the Science Faculty Activities 2018-2019 Academic year cont...

Field trips and practical enrichment activities have again been a feature this year. The Year 13 Biologists visited Studland and Kimmeridge to undertake fieldwork surveys of coastal ecosytems. The Year 12 Chemists were involved in an Organic Synthesis Day with the Year 12 Physicists undertaking a thermal physics practical afternoon in Activities Week. Understandably, the outside activities of the Geology department are unrivalled with day field trips to a number of locations around the South including the traditional visits to Lulworth for structural geology, fossil hunting in Lyme Regis with the find of the largest ammonoid of the year being a whopping 32cm, and Frome to visit the inner workings of a modern limestone quarry. This year, there was an additional visit to the Isle of Wight investigating land slips and their effects as part of the developing field programme to accompany the new A-level specification. Fortunately the weather was kind and all were able to make some fantastic observations, sketch work and measurements without the threat of the clip board dissolving in front of them.

Science Week was celebrated with a range of activities – the highlight being the Biology Bake Off with students designing and making biology themed cakes. Whilst all the cakes were delicious, some appeared more palatable than others. After judging, the cakes were then sold, including all the pieces of the 'brain cake' to willing consumers! All the money raised was donated to the Isle of Wight Air Ambulance and Cancer Research, both charities linked with two of our BAYS presenters this year. Other activities included quizzes, practical activities and bingo competitions for Lower and Middle School students. For our Year 12 and Year 13 students there was the STEM Conference organised by Mrs Armstrong. This annual conference attended by BWS, Goldolphin and SWGS students involved a large number of workshops on areas including Mathematical Modelling of Financial Systems, Oceanography, Antibiotic Resistance, and Lazer Technology. Approximately, 80-85% of our Sixth Form students study one or more A Level in Science with many of the Year 13 leavers each year going on to undertake STEM related further study or careers. We recognise the role of these talks in inspiring our students whilst opening their eyes to the possibilities that lie beyond BWS in the fields of Science and Engineering.

In addition to the Science Week activities, there have been several other activities and competitions for students in the Lower School and Middle School. The opportunities are there for boys to seize so we would encourage students to make sure they listen to the assembly announcements, notices and emails that regularly advertise these things. In May a Year 10 group took part and won the Fleet Air Museum Engineering Challenge. In July a group of ten boys from Year 8 attended the inaugural Project X competition hosted at Boscombe Down which saw them explore opportunities in STEM and the RAF. Their task was to design a model aircraft that would fly down a zipwire and safely release cargo eggs in to dropzones. Team Fancy Bird took home the winners trophy with their colourful design, while Team 25 took third place. A Middle School team won the national Royal Society of Chemistry 'Top of the Bench' competition. They initially won the regional competition at Portsmouth Grammar School before taking the Winner's trophy in the Final at Birmingham University. This involved beating the 32 teams from across Great Britain with additional teams from some other European countries. After being national finalists last year in the Faraday Challenge it was this year our turn to host the local competition which was won by Trafalgar School's team.



#### Report on the Science Faculty Activities 2018-2019 Academic year cont..

Engineering is an area which interests many of our students. We are an Arkwright Engineering School and this year we have been pleased to have 4 Arkwright Scholars and 2 Arkwright Associates amongst our Year 12 and Year 13 students. However, we are even more delighted to report that in July a total of 7 Year 11 students were awarded scholarships - a bumper year which is in no small part down to the hard work of the students in undertaking a project, completing their application forms, undertaking the aptitude tests and performing well in their interviews. Our link with the ImechE and IET continues and we were once again delighted to host their annual schools lecture in December. Year 10 and many Sixth Form students attended the lecture which was delivered by Richard Browning involving a demonstration of his 'anti-Gravity' suit – few experiences could match this with respect to inspiring the next generation of scientists, engineers and entrepreneurs!

A visit from the Planetarium coinciding with the 50th anniversary of the lunar landings gave Year 7 an opportunity to explore the solar system and beyond. Year 9 undertook an Energy Quest Engineering Challenge Day in November where they explored a range of engineering solutions to the issues surrounding global energy supplies. The Year 7 Science investigation work was this year showcased with their 'conference style posters' at the Year 5 Open Afternoons with interested parents and Year 5 students making decisions about whose was the best investigation. Wiltshire Wildlife Trust visited in June to work with Year 9 boys.

We feel strongly that our role as Science educators is to provide students with as many science practicals as possible so that students can make their own observations and subsequent conclusions. A quick, back of the envelope calculation demonstrates that in each week there will be a maximum of 108 practical lessons in Science. Whilst it would be a rare week to have 108, the number of practical lessons each week normally averages out at over 80. The technician team of 7 staff are hugely experienced, conscientious and knowledgeable and make sure that not only is practical apparatus ready for classes but that practicals are undertaken safely and carefully. This is a huge undertaking for the Science technician team who work efficiently and professionally and always with good humour. The Science Faculty could not function without their professionalism and they certainly deserve a mention as we celebrate the successes of the year as their work underpins much of what happens in Science.

(Dr Emma Baker, Director of Science)







Yr 13 Organic Synthesis



Yr12 and Yr11 peer mentoring



#### The Team

**Director of Science:** 

Dr Emma Baker

**Head of Biology:** 

Mrs Shirley Madzarevic

**Head of Geology:** 

Mr Mike Thorne

**Science Teachers:** 

Mr Dan Brown

Mrs Tracy Collingridge Miss Amelia Deakin

Mr Robert Holzer

Mrs Marie Jenner

Mrs Zoe Lambard

Dr Richard Melville

Mr Jerry Rogers

Dr Stuart Smallwood (Geology)

Mrs Ruth Tonkin

**Head of Chemistry:** 

Dr Colette Maunder (from April 2020)

**Head of Physics:** 

Mr Mike Thorne (KS3 / KS5) Mrs Lucinda Kimberley (KS4)

**Head of Psychology:** 

Ms Nikki Mesnard

**Technicians:** 

Mrs Liz Williams (Science Technical Advisor)

Mrs Melanie Howard (Lead Technician)

Mrs Jessica Clark (Support Assistant / Science)

Dr Glenville D'Mello (Science Technician)

Mr Mark England (Science Technician)

Mrs Carol Landon (Science Technician)

Mrs Yvette Quirk (Science Technician)



**EXON Mobil visiting speaker** 



**Annual Yr7 Science Fair** 



**BAYS** afterschool talk



@BWSScience @BWSBiology1 @BWSChemistry

@BWSPhysics @BWSGeology



#### **Job Description**

Post Title: Teacher of Physics

Reporting to: Head of Physics

#### **KEY AREA**

Working Environment:

Punctuality and Attendance:

Good Order:

Classroom Management:

**Lesson Content:** 

Preparation:

Homework:

#### **RESPONSIBILITIES**

- To ensure that teaching areas are organised appropriately and provide as pleasant, stimulating and tidy a working environment as possible.
- To insist on punctuality and to lead by example in this respect.
- To record and check any absences from lessons and to provide work as necessary in cases of extended absence.
- To take a register of students in all sixth form lessons and follow up absenteeism.
- To ensure that each lesson starts and ends in an orderly fashion.
- To maintain high standards of classroom discipline and control, and refer to the Head of Department any pupils who are difficult or disruptive.
- To follow departmental syllabuses and schemes of work and contribute to their enhancement and development.
- To ensure that all lessons are thoroughly prepared and carefully structured and that the work is appropriate to the needs and abilities of each pupil. This should be recorded in their planner/diary; these should show work to be covered (as a forecast) and/or work covered (as a record) depending upon the subject matter and the individual teacher's preference. These planners should be available to the Headmaster, Deputy Headmaster and Head of Department.
- To set homework regularly on the nights specified in the homework timetable and in accordance with the School's homework policy. All homework set should be recorded in the planner. Pupils who do not produce satisfactory work on time should be referred to the Head of Department and, if appropriate, the Head of School.



#### **KEY AREA**

Marking:

Assessment/Reports:

Books/Equipment/ Resource:

Meetings:

Rewards/Sanctions/Concerns:

Professional Development:

Performance Management:

Extra-Curricular Activities:

#### RESPONSIBILITIES

- To mark work regularly, in line with School and departmental policy and guidance, and to keep up to date records of each pupil's work and progress. This record should be available to the Head of Department/Head of School and Deputy Headmaster.
- To complete pupil assessments, profiles and reports carefully and promptly and to adhere to the School's policies and procedures for formal assessments and examinations.
- To keep careful records of the issue and collection of books and resources and to inform the Head of Department of any loss or damage which occurs.
- To manage the use of all resources by pupils in line with the School's Health & Safety Policy.
- To attend and contribute to departmental and staff meetings.
   To attend parents' evenings and any other meetings directed by the Headmaster.
- To apply the School's system of rewards and sanctions, and to inform the Head of Department of pupils worthy or praise and pupils causing concern.
- To extend professional expertise by seeking and applying for relevant in-service training and attending whole staff training sessions.
- To participate in the School's system of Performance Management.
- To contribute to the School's extra-curricular activities programme if they so choose. This is a non-contractual area where staff participation is entirely a matter of discretion and goodwill. However, such involvement carries important reciprocal benefits for pupils and the development of the School's ethos but also for the professional development of the colleague concerned.

Bishop Wordsworth's School is committed to safeguarding and promoting the welfare of children and young people and expects all staff and volunteers to share this commitment. The successful candidate will be expected to undergo enhanced DBS clearance.



### **Bishop Wordsworth's School Person Specification – Classroom Teacher**

The following are essential or desirable characteristics associated with the post of a classroom teacher at Bishop Wordsworth's Grammar School. Evidence will be drawn from the application form and lesson observation, or explored at interview.

	Essential	Desirable
Qualifications		
Good honours degree in the specified subject or in a closely-related area	a 🗸	
<ul> <li>UK Qualified Teacher Status</li> </ul>	<b>✓</b>	
<ul> <li>Evidence of further relevant qualifications or training</li> </ul>		✓
Evidence of recent professional development		✓
Experience		
<ul> <li>Evidence of successful teaching at KS5 in the specified subject</li> </ul>		✓
Experience of pastoral work in a school setting		✓
Experience in more than one school	į	✓
Knowledge		
Up to date knowledge of the curriculum and current trends or developments	23	
Familiarity with the requirements of public examinations in the subject		✓
Skills (C)		
A confident and competent classroom practitioner		
A proven record of securing good progress for pupils		✓
Ability to differentiate teaching to meet the needs of all pupils	✓	
<ul> <li>Good communication, organisational and interpersonal skills</li> </ul>	✓	
❖ Ability to converse fluently in English	✓	
A willingness to share good practice and promote the development of th subject	e 🗸	
Ability to use and promote the effective use of ICT	✓	
An ability to build positive working relationships with colleagues	✓	
An ability to work effectively as part of a team and to work independently	/	
Other		
Enthusiasm for learning and a passion for teaching	✓	
High expectations of pupils and their behaviour	✓	
A willingness to engage fully with continuing professional development	<b>✓</b>	
A recognition of the importance of personal responsibility for Health and Safety	<b>√</b>	
A demonstrable commitment to equal opportunities	✓	
<ul> <li>Commitment to safeguarding and promoting the welfare of pupils</li> </ul>	✓	
❖ A commitment to the School ethos and selective education in general	✓	
Ability and willingness to contribute to the wider life of the School	✓	

To deliver services effectively, a degree of flexibility is needed, and the post holder may be required to perform work commensurate with the level of responsibility of the role not specifically re referred to above.

